



## RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/486,623B  
Source: 1600  
Date Processed by STIC: 5/14/2003

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MAY 22 2003

TECH CENTER 1600/2900

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- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

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<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry directly to:  
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7<sup>th</sup> Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202  
Or  
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 04/24/2003



1600

RECEIVED

MAY 22 2003

TECH CENTER 1600/2

**RAW SEQUENCE LISTING**  
**PATENT APPLICATION: US/09/486,623B**

DATE: 05/14/2003  
 TIME: 11:10:43

Input Set : A:\ISIS3292.ST25.txt  
 Output Set: N:\CRF4\05142003\I486623B.raw

3 <110> APPLICANT: Nielsen, Peter E.  
 5 <120> TITLE OF INVENTION: Peptide Nucleic Acids Having Antibacterial Activity  
 7 <130> FILE REFERENCE: ISIS-3292  
 9 <140> CURRENT APPLICATION NUMBER: 09/486,623B  
 10 <141> CURRENT FILING DATE: 2000-07-06  
 12 <150> PRIOR APPLICATION NUMBER: 08/932,140  
 13 <151> PRIOR FILING DATE: 1997-09-16  
 15 <160> NUMBER OF SEQ ID NOS: 30  
 17 <170> SOFTWARE: PatentIn version 3.2  
 19 <210> SEQ ID NO: 1  
 20 <211> LENGTH: 14  
 21 <212> TYPE: DNA  
 22 <213> ORGANISM: Artificial Sequence  
 24 <220> FEATURE:  
 25 <223> OTHER INFORMATION: Synthetic construct  
 27 <400> SEQUENCE: 1  
 28 tgaccatgt tacg  
 31 <210> SEQ ID NO: 2  
 32 <211> LENGTH: 17  
 33 <212> TYPE: DNA  
 34 <213> ORGANISM: Artificial Sequence  
 36 <220> FEATURE:  
 37 <223> OTHER INFORMATION: Synthetic construct  
 39 <400> SEQUENCE: 2  
 40 tacgtgttcc ctgtgtg  
 43 <210> SEQ ID NO: 3  
 44 <211> LENGTH: 17  
 45 <212> TYPE: DNA  
 46 <213> ORGANISM: Artificial Sequence  
 48 <220> FEATURE:  
 49 <223> OTHER INFORMATION: Synthetic construct  
 51 <400> SEQUENCE: 3  
 52 gagtattcaa cattttc  
 55 <210> SEQ ID NO: 4  
 56 <211> LENGTH: 17  
 57 <212> TYPE: DNA  
 58 <213> ORGANISM: Artificial Sequence  
 60 <220> FEATURE:  
 61 <223> OTHER INFORMATION: Synthetic construct  
 63 <400> SEQUENCE: 4  
 64 attgtcttcc tttttca  
 67 <210> SEQ ID NO: 5  
 68 <211> LENGTH: 15

*pp 3-6*  
 Does Not Comply  
 Corrected Diskette Needed

14

17

17

17

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/486,623B

DATE: 05/14/2003  
TIME: 11:10:43

Input Set : A:\ISIS3292.ST25.txt  
Output Set: N:\CRF4\05142003\I486623B.raw

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69 <212> TYPE: DNA
70 <213> ORGANISM: Artificial Sequence
72 <220> FEATURE:
73 <223> OTHER INFORMATION: Synthetic construct
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77 <221> NAME/KEY: misc_feature
78 <222> LOCATION: (1)..(14)
79 <223> OTHER INFORMATION: Modified site. N-[acetyl(2-aminoethyl)] glycine backbone
81 <220> FEATURE:
82 <221> NAME/KEY: misc_feature
83 <222> LOCATION: (15)..(15)
84 <223> OTHER INFORMATION: Modified site. N-[acetyl(2-aminoethyl)]-C-lysine-glycine
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86 <400> SEQUENCE: 5
87 ggtcatagt gtttc
90 <210> SEQ ID NO: 6
91 <211> LENGTH: 15
92 <212> TYPE: DNA
93 <213> ORGANISM: Artificial Sequence
95 <220> FEATURE:
96 <223> OTHER INFORMATION: Synthetic construct
99 <220> FEATURE:
100 <221> NAME/KEY: misc_feature
101 <222> LOCATION: (1)..(14)
102 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone
104 <220> FEATURE:
105 <221> NAME/KEY: misc_feature
106 <222> LOCATION: (15)..(15)
107 <223> OTHER INFORMATION: Modified site. N-[acetyl(2-aminoethyl)]-C-lysine-glycine
backbone
109 <400> SEQUENCE: 6
110 tactcatact cttcc
113 <210> SEQ ID NO: 7
114 <211> LENGTH: 15
115 <212> TYPE: DNA
116 <213> ORGANISM: Artificial Sequence
118 <220> FEATURE:
119 <223> OTHER INFORMATION: Synthetic construct
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123 <221> NAME/KEY: misc_feature
124 <222> LOCATION: (1)..(14)
125 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone
127 <220> FEATURE:
128 <221> NAME/KEY: misc_feature
129 <222> LOCATION: (15)..(15)
130 <223> OTHER INFORMATION: Modified site. N-[acetyl(2-aminoethyl)]-C-lysine-glycine
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132 <400> SEQUENCE: 7
133 gaatactcat actct
136 <210> SEQ ID NO: 8
137 <211> LENGTH: 15
138 <212> TYPE: DNA

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RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/486,623B

DATE: 05/14/2003  
TIME: 11:10:43

Input Set : A:\ISIS3292.ST25.txt  
Output Set: N:\CRF4\05142003\I486623B.raw

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139 <213> ORGANISM: Artificial Sequence
141 <220> FEATURE:
142 <223> OTHER INFORMATION: Synthetic construct
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147 <222> LOCATION: (1)..(14)
148 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone
150 <220> FEATURE:
151 <221> NAME/KEY: misc_feature
152 <222> LOCATION: (15)..(15)
153 <223> OTHER INFORMATION: Modified site. N-[acetyl(2-aminoethyl)]-C-lysine-glycine
backbone
155 <400> SEQUENCE: 8
156 acgccacatc ttcgc
159 <210> SEQ ID NO: 9
160 <211> LENGTH: 15
161 <212> TYPE: DNA
162 <213> ORGANISM: Artificial Sequence
164 <220> FEATURE:
165 <223> OTHER INFORMATION: Synthetic construct
168 <220> FEATURE:
169 <221> NAME/KEY: misc_feature
170 <222> LOCATION: (1)..(1)
171 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone
173 <220> FEATURE:
174 <221> NAME/KEY: misc_feature
175 <222> LOCATION: (2)..(4) FYI; "n" can only represent a single nucleotide
176 <223> OTHER INFORMATION: Modified Site. N-pseudo isocytosine-acetyl (2-aminoethyl)
177 glycine backbone
179 <220> FEATURE:
180 <221> NAME/KEY: misc_feature
181 <222> LOCATION: (5)..(6)
182 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone
184 <220> FEATURE:
185 <221> NAME/KEY: misc_feature
186 <222> LOCATION: (7)..(7) "n" can only represent a single nucleotide
187 <223> OTHER INFORMATION: Modified Site. N-pseudo isocytosine-acetyl (2-aminoethyl)
188 glycine backbone
190 <220> FEATURE:
191 <221> NAME/KEY: misc_feature
192 <222> LOCATION: (8)..(8) "n" can only represent a single nucleotide
193 <223> OTHER INFORMATION: Modified Site. (O-2-aminoethyl-O'acetyl-ethyleneglycol),
194 (O-2-aminoethyl-O'-acetyl-ethyleneglycol),
195 (O-2-aminoethyl-O'-acetyl-ethyleneglycol)
197 <220> FEATURE:
198 <221> NAME/KEY: misc_feature
199 <222> LOCATION: (9)..(14)
200 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone
202 <220> FEATURE:
203 <221> NAME/KEY: misc_feature

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RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/486,623B

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TIME: 11:10:43

Input Set : A:\ISIS3292.ST25.txt  
Output Set: N:\CRF4\05142003\I486623B.raw

204 <222> LOCATION: (15)..(15)  
 205 <223> OTHER INFORMATION: Modified Site. N-[acetyl (2-aminoethyl)] -C-lysine-glycine  
 206 backbone  
 208 <400> SEQUENCE: 9  
**W--> 209 tnnnttnnct tcct** 15  
 212 <210> SEQ ID NO: 10  
 213 <211> LENGTH: 15  
 214 <212> TYPE: DNA  
 215 <213> ORGANISM: Artificial Sequence  
 217 <220> FEATURE:  
 218 <223> OTHER INFORMATION: Synthetic construct  
 221 <220> FEATURE:  
 222 <221> NAME/KEY: misc\_feature  
*n can only represent a single nucleotide*  
 223 <222> LOCATION: (1)..(1)  
 224 <223> OTHER INFORMATION: Modified Site. N-pseudo isocytosine-acetyl (2-aminoethyl)  
 225 glycine backbone  
 227 <220> FEATURE:  
 228 <221> NAME/KEY: misc\_feature  
*n can only represent a single nucleotide*  
 229 <222> LOCATION: (2)..(4)  
 230 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone  
 232 <220> FEATURE:  
 233 <221> NAME/KEY: misc\_feature  
*n can only represent a single nucleotide*  
 234 <222> LOCATION: (5)..(6)  
 235 <223> OTHER INFORMATION: Modified Site. N-pseudo isocytosine-acetyl (2-aminoethyl)  
 236 glycine backbone  
 238 <220> FEATURE:  
 239 <221> NAME/KEY: misc\_feature  
 240 <222> LOCATION: (7)..(7)  
 241 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone  
 243 <220> FEATURE:  
 244 <221> NAME/KEY: misc\_feature  
*n can only represent a single nucleotide*  
 245 <222> LOCATION: (8)..(8)  
 246 <223> OTHER INFORMATION: Modified Site. (O-2-aminoethyl-O'-acetyl-ethyleneglycol),  
 247 (O-2-aminoethyl-O'-acetyl-ethyleneglycol),  
 248 (O-2-aminoethyl-O'-acetyl-ethyleneglycol)  
 250 <220> FEATURE:  
 251 <221> NAME/KEY: misc\_feature  
 252 <222> LOCATION: (9)..(14)  
 253 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone  
 255 <400> SEQUENCE: 10  
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 259 <210> SEQ ID NO: 11  
 260 <211> LENGTH: 15  
 261 <212> TYPE: DNA  
 262 <213> ORGANISM: Artificial Sequence  
 264 <220> FEATURE:  
 265 <223> OTHER INFORMATION: Synthetic construct  
 268 <220> FEATURE:  
 269 <221> NAME/KEY: misc\_feature

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/486,623B

DATE: 05/14/2003

TIME: 11:10:43

Input Set : A:\ISIS3292.ST25.txt

Output Set: N:\CRF4\05142003\I486623B.raw

270 <222> LOCATION: (1)..(14)  
 271 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone  
 273 <220> FEATURE:  
 274 <221> NAME/KEY: misc\_feature  
 275 <222> LOCATION: (15)..(15)  
 276 <223> OTHER INFORMATION: Modified Site. N-[acetyl (2-aminoethyl)]-C-lysine-glycine  
 277 backbone  
 279 <400> SEQUENCE: 11  
 280 catactcttt ctccct  
 283 <210> SEQ ID NO: 12  
 284 <211> LENGTH: 25  
 285 <212> TYPE: DNA  
 286 <213> ORGANISM: Artificial Sequence  
 288 <220> FEATURE:  
 289 <223> OTHER INFORMATION: Synthetic construct  
 292 <220> FEATURE:  
 293 <221> NAME/KEY: misc\_feature Site  
 294 <222> LOCATION: (1)..(2)  
 295 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone  
 297 <220> FEATURE:  
 298 <221> NAME/KEY: misc\_feature n can only represent a single nucleotide  
 299 <222> LOCATION: (3)..(3)  
 300 <223> OTHER INFORMATION: Modified Site. N-pseudo isocytosine-acetyl (2-aminoethyl)  
 301 glycine backbone  
 303 <220> FEATURE:  
 304 <221> NAME/KEY: misc\_feature  
 305 <222> LOCATION: (4)..(4)  
 306 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone.  
 308 <220> FEATURE:  
 309 <221> NAME/KEY: misc\_feature n can only represent a single nucleotide  
 310 <222> LOCATION: (5)..(7)  
 311 <223> OTHER INFORMATION: Modified Site. N-pseudo isocytosine-acetyl (2-aminoethyl)  
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 312 backbone  
 314 <220> FEATURE:  
 315 <221> NAME/KEY: misc\_feature  
 316 <222> LOCATION: (8)..(10)  
 317 <223> OTHER INFORMATION: Modified Site. N-acetyl (2-aminoethyl) glycine backbone  
 319 <220> FEATURE:  
 320 <221> NAME/KEY: misc\_feature n can only represent a single nucleotide  
 321 <222> LOCATION: (11)..(11)  
 322 <223> OTHER INFORMATION: Modified Site. N-pseudo isocytosine-acetyl (2-aminoethyl)  
 323 glycine backbone  
 325 <220> FEATURE:  
 326 <221> NAME/KEY: misc\_feature  
 327 <222> LOCATION: (12)..(12)  
 328 <223> OTHER INFORMATION: Modified Site. (O-2-aminoethyl-O'-acetyl-ethyleneglycol),  
 329 (O-2-aminoethyl-O'-acetyl-ethyleneglycol),  
 330 (O-2-aminoethyl-O'-acetyl-ethyleneglycol)  
 332 <220> FEATURE:

This applies to subsequent requests

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/09/486,623B

DATE: 05/14/2003  
TIME: 11:10:44

Input Set : A:\ISIS3292.ST25.txt  
Output Set: N:\CRF4\05142003\I486623B.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:9; N Pos. 2,3,4,7,8  
Seq#:10; N Pos. 1,5,6,8  
Seq#:12; N Pos. 3,5,6,7,11,13  
Seq#:13; N Pos. 1,3,5,6,8  
Seq#:19; N Pos. 8  
Seq#:20; N Pos. 2,4,8

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/09/486,623B

DATE: 05/14/2003

TIME: 11:10:44

Input Set : A:\ISIS3292.ST25.txt

Output Set: N:\CRF4\05142003\I486623B.raw

L:209 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0  
L:256 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0  
L:344 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0  
L:408 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0  
L:564 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0  
L:616 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0